

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
Procedures to Govern the Use of)	IB Docket No. 02-10
Satellite Earth Stations on Board)	
Vessels in Bands Shared With)	
Terrestrial Fixed Service)	

COMMENTS OF THE SATELLITE INDUSTRY ASSOCIATION

The Satellite Industry Association (“SIA”), hereby comments on the Notice of Inquiry in the above-captioned proceeding.¹ SIA supports the Commission’s efforts to develop a licensing regime for fixed satellite service (“FSS”) earth stations on board vessels (“ESVs”). ESVs can provide valuable services to ships and their passengers and crew, and licensing them, subject to rules for protecting terrestrial systems from interference in shared bands, will enable FSS operators to make more efficient use of their spectrum.

The list of maritime communications requirements is long, and has grown over time. Crews and passengers need – and have come to expect – the full range of voice, video, and data communications that they enjoy on land.

With their broad footprints and distance insensitive technology, satellites are well-suited to satisfying these requirements. Satellites make it possible to communicate with the shore and with other ships through standard telephone calls, video-conferencing, e-mail, and fax. Satellites offer crew and passengers the ability to browse the Internet, watch television and listen to the radio—all in real time. Satellites also

¹ In the Matter of Procedures to Govern the Use of Satellite Earth Stations on Board Vessels in Bands Shared With Terrestrial Fixed Services, *Notice of Inquiry*, IB Docket No. 02-10 (rel. Feb. 4, 2002) [hereinafter, the “NOI”].

enhance national security by expanding maritime service options for the military, and providing redundancy for military communications systems on the high seas.

In some cases, mobile satellites are best equipped to satisfy maritime communications needs.² In other instances, fixed satellites are the technology of choice. Mobile satellites and fixed satellites have different system architectures, coverage patterns, link budgets, service capabilities, and price structures. Mobile satellites and fixed satellites also have separate terrestrial networks to which maritime stations can be added as points of communication. To maximize efficiency, enhance flexibility, increase competition, and improve service options, the Commission should establish a regulatory regime that makes it possible for the maritime industry to transmit and receive through both types of satellite systems, and leave it to the consumer to determine which type of system is optimal for particular service needs.

The regulatory regime that is presently in place artificially discourages the use by the maritime industry of FSS satellites. Currently, the proponents of ESV services on cargo, passenger, recreational and military vessels must seek special temporary authority on an *ad hoc* basis.³ This authority typically is subject to waivers and conditions, and is limited to a term of six months, making it necessary to renew frequently and adding an element of uncertainty to the long term regulatory status of service. These limitations have discouraged the maritime industry from using FSS services and have hindered the full development of those services.

² Currently, in MSS bands with operational systems, such as 1.6/2.4 GHz and L-band, there are growing markets for earth stations on board pleasure boats and commercial vessels. MSS terminals in these bands are authorized under blanket licenses through Part 25 rules. The ease of commercial distribution once a blanket license is obtained contributes to the growing use of maritime MSS terminals in these services. Therefore, whatever regulatory regime the Commission adopts for ESVs in C- and Ku-band should not restrict the existing rules and policies governing distribution and maritime use of MSS terminals in MSS bands.

³ See NOI at ¶13.

To rectify these deficiencies, the Commission should endeavor to establish a licensing regime for FSS services in the maritime environment that is stable and predictable. It also should adopt a license term for these services that is sufficiently long to justify maritime industry investment in FSS earth stations. By taking these steps, the Commission will facilitate more effective use of FSS spectrum over ocean masses.

Further, the Commission should work in the ITU to develop a consistent process for recognizing ESV operations worldwide. Consistent rules worldwide would facilitate the international coordination of U.S. licenses ESVs. This, in general, would help U.S. licensed ESV operators, since ships with ESVs often pass the shores of several countries.

SIA recognizes that, because using FSS frequencies for ESV operation may not conform to conventional FSS allocations, such use may need to be subject to special requirements. SIA further recognizes that there is an equipment requirement for stabilized FSS antennas that are to be used on-board vessels. And SIA recognizes that, in shared bands, the Commission needs to adopt rules or policies to prevent interference to terrestrial stations. With such protections in place, however, the Commission need not limit ESVs to “receive-only.”⁴ In fact, to benefit from the full range of two-way satellite services available on land, ESVs need to transmit all forms of information to, as well as receive all forms of information from, the shore.

Facilitating the use of FSS frequencies by the maritime industry will improve spectrum efficiency. Each year, thousands of cargo, passenger, recreational, and military vessels traverse the world’s oceans, seas and gulfs which, combined, account for almost 70 percent of the Earth’s surface area.⁵ At the same time, dozens of

⁴ See *id.* at ¶24.

⁵ See Ocean 98, Ocean Facts and Statistics (<http://www.ocean98.org/fact.htm#E>).

telecommunications satellites orbit the Earth with downlink beams that cover virtually all of these 362,000,000 square kilometers of water.⁶ The limitations of the current licensing regime effectively make major portions of the service areas of FSS systems off limits, thereby depriving vessel operators, crew and passengers of the technical and commercial advantages of FSS services. Normalizing the license process will bring fuller service offerings to these maritime users, will add competitive choice, and will enable FSS systems to make more efficient use of their frequencies and coverage areas.

⁶ *See id.*

CONCLUSION

For the reasons stated herein, SIA supports the Commission's efforts to establish a sound regulatory framework for the licensing and use of FSS earth stations on board vessels in order to make the benefits of ESV services available to the public.

Respectfully submitted,

SATELLITE INDUSTRY ASSOCIATION

Richard DalBello
Executive Director
225 Reinekers Lane, Suite 600
Alexandria, VA 22314
(703) 739-8357

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